

AGITATOR INQUIRY DATA SHEET

Customer Details

Name	<input type="text"/>
Phone	<input type="text"/>
E-mail	<input type="text"/>
Country	<input type="text"/>

Notes
<input style="height: 100px;" type="text"/>

1 Product to be Mixed

Application Area

Specific Product Characteristics

Foaming Tendency

Agglomeration Tendency

Solids Hard to Wet

Solids Abrasive

Other

2 Process

Plant Data

Scaled-up from Laboratory Test

New Production

Process Description

Operation

Batch

Maximum mixing volume

Continuous

Minimum mixing volume

Minimum operation volume

3 Flow Behavior

Newtonian

Non-Newtonian

Constant K

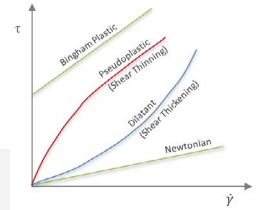
Pa*secⁿ

$$\tau = \tau_0 + K * \dot{\gamma}^n$$

Exponent n

$$\mu = \tau_0 * \dot{\gamma}^{-1} + K * \dot{\gamma}^{n-1}$$

Yield stress



4 Product Data

	Products	Quantity	Flow Rate (m ³ /hr)	Density (kg/m ³)	Viscosity (cp)	Particle (size d k95 μm)	Additional info
In		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Out		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

5 Mixing Tasks

Liquid Blending

Mixing Time

Solids Suspension

Other

Size of largest particles 5% of solid phase

Dispersion Liquid-Liquid (Emulsion)

Interfacial Tension

Required Sauter Mean Drop

Dispersion Gas-Liquid

Gas Flow Rate

Surface Tension

Gas Diffusivity

Molecular Weight of Solvent

Molecular Weight of Gas

Process Temperature

Gas Solubility	Mass Solubility	<input type="text"/>	
	Mass Gas Concentration in Solution	<input type="text"/>	
Heat Transfer	Heating Time	<input type="text"/>	
	Cooling Time	<input type="text"/>	
	Temperature Holding	<input type="text"/>	
Heating / Cooling Agent in Jacket	Liquid Agent		
	Vapor Agent		
	Inlet Temp.	<input type="text"/>	
	Product Specific Heat	<input type="text"/>	
	Product Heat Conductivity	<input type="text"/>	
	Initial Temp. in the Vessel	<input type="text"/>	

6 Operation Conditions

	Work	Design	Units
Pressure	<input type="text"/>	<input type="text"/>	
Vacuum	<input type="text"/>	<input type="text"/>	
Temperature	<input type="text"/>	<input type="text"/>	

7 Bottom Bearing Allowed?

8 Agitation During Filling / Emptying

9 Impeller Type Determined By

10 Shaft Sealing

11 Shaft Coupling Inside the Tank

12 Wetted Parts Made Of

13 Required Surface Finish Of Wetted Parts

14 Motor

Frequency Hz

Voltage V

IP

Amb. Temp.

15 Location

16 Explosion Protection

Temperature Class

Zone

Type of Protection

Sub-Group

Area
Classification

Out Side Vessel

Inside Vessel

17 Vessel Specification by

Vessel Type

Vessel Diameter

Shape of Top

Shell Length

Shape of Bottom

Baffles Existing Inside Vessel

Manhole Size

Size of Opening Available for Impeller

18 Remarks